

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Christoph Brabec	Art Unit :	1795
Serial No. :	10/522,862	Examiner :	Golam Mowla
Filed :	September 6, 2005	Conf. No. :	4870
Title :	CHIP CARD COMPRISING AN INTEGRATED ENERGY CONVERTER		

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents

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**REPLY BRIEF**

Pursuant to 37 C.F.R. § 41.41, Applicant responds to the Examiner's Answer ("the Answer") as follows.

Appellant has provided detailed arguments against the rejections set forth in the final office action dated July 9, 2008 in Appellant's Brief on Appeal. In this Reply Brief, Appellant only provides comments on the Examiner's new arguments presented in the Answer.

Claims 1-4, 8-14, and 18 under 35 U.S.C. §103(a) over Ou in view of Loutfy

Independent claims 1 and 9 are discussed first. The Examiner asserts in the Answer that

"The Appellant does not clearly define the term 'polymeric compound' in the original Specification as filed. What is stated in the Specification is 'the terms are not intended to be subject to any limitation with respect to molecular size, particularly to polymeric and/or oligomeric materials, but instead the use of 'small molecules' is completely feasible as well' (see Specification, page 2, lines 7-9). Therefore, one reading the claims in light of the specification would have realized the term 'polymeric compound' is not intended to be limited with respect to the molecular size and therefore can have any number of repeating monomeric structure and can be small molecules as well." See the paragraph bridging pages 10 and 11; emphases added.

The Examiner clearly errs. The passage cited by the Examiner above is in the second paragraph on page 2 of the specification. At the very beginning of this paragraph, the specification states that "[t]he terms 'polymer' ..., 'organic material,' and 'functional polymer' herein encompass ...." In other words, one skilled in the art could readily recognize that this

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entire paragraph focuses on defining the three just-mentioned terms. Thus, when the specification states in the same paragraph that “the terms are not intended to be subject to any limitation with respect to molecular size, particularly to polymeric and/or oligomeric materials, but instead the use of ‘small molecules’ is completely feasible as well,” “the terms” mentioned therein clearly refer to “polymer,” “organic material,” and “function polymer,” but not “polymeric compound” as asserted by the Examiner. Indeed, as shown in the passage cited by the Examiner above, the term “polymeric material” or “polymeric compound” is used in the specification to define the terms “polymer,” “organic material,” and “function polymer.” In other words, the specification at most teaches that these three terms can include oligomeric materials or small molecules, but does not teach that the term “polymeric compound” includes oligomeric materials or small molecules. It follows that one skilled in the art would not consider the term “polymeric compound” used in the present application to include oligomeric materials or small molecules.

Further, as discussed in Appellant’s Brief on Appeal, the specification uses the terms “polymeric materials,” “oligomeric materials,” and “small molecules” together to define the three terms discussed above. *See* page 3, 1<sup>st</sup> paragraph. Thus, one skilled in the art, in view of the specification, could readily understand that the term “polymeric material” or “polymeric compound” do not include oligomeric materials and small molecules.

The Examiner also asserts that

“As stated above, Appellant does not clearly define the term ‘polymeric compound.’ In fact, the Specification is silent as to whether the term ‘polymeric compound’ excludes oligomeric material or small molecules. If the Appellant desired the term ‘polymeric compound’ to exclude oligomeric material or small molecules, Appellant should have provided either (a) special definition of the term ‘polymeric compound’ or (b) should have explicit mention[ed] that in the claim. In this case, Appellant fails to do both.” *See* the Answer, page 11, last paragraph.

As discussed, one skilled in the art, in view of the specification, could readily understand that the term “polymeric materials” or “polymeric compound” do not include oligomeric materials and small molecules. Thus, Appellant submits that it would not be necessary to include such a definition of the term “polymeric compound” in independent claims 1 and 9.

In addition, the Examiner asserts that

“the Examiner also notes that the features upon which applicant relies (i.e., polymeric compound being a molecule containing a relatively large number of monomeric repeat units) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.” *See* the Answer, page 12, 1<sup>st</sup> paragraph.

Appellant respectfully disagrees. Contrary to the Examiner's assertion, Appellant relies on the term “polymeric compound,” but not the phrase “a molecule containing a relatively large number of monomeric repeat units,” for patentability of independent claims 1 and 9. Appellant mentions the phrase quoted by the Examiner merely to interpret the term “polymeric compound” and therefore would not be required to include this phrase in independent claims 1 and 9.

Finally, the Examiner asserts that

“Phthalocyanine is a polymeric compound as evidenced by Achar et al. .... Since the Appellant does not explicitly claim that the photovoltaically active polymeric compound can not be phthalocyanine compound ... or small molecules with limited number of repeating units, the photovoltaically active phthalocyanine compound of Loutfy reads on photovoltaically active polymeric compound. ... Just because phthalocyanine compound contains four monomers, it does not make the compound non-polymeric. In fact, phthalocyanine is polymeric compound as evidenced by US 4649189, ... In addition, if the Appellant desired the polymeric compound to have more than four monomers, then Appellant should have explicitly mentioned that in the claim.” *See* the Answer, the paragraph bridging pages 12 and 13 and the 3<sup>rd</sup> paragraph on page 13.

Appellant again respectfully disagrees. U.S. Patent No. 4,649,189 (“Achar”) describes a method of making a phthalocyanine polymer by using an imide-linked bisphthalonitrile. *See, e.g.,* the abstract. In particular, Achar states that

“[a]s can be seen from Structure A the four groups about the central M – (where M is the metal atom as is described therein) are essentially identical. Each branch in the north, south, east, and west directions terminate in a dicyano grouping which is capable of bonding with another ‘M’ to create the regular ladder-type of sheet-type polymers of the present invention.” *See* column 7, lines 19-36; emphasis added.

In view of the above statements, it would be apparent to one skilled in the art that the phthalocyanine polymer described in Achar is prepared from a phthalocyanine monomer of Structure A. In other words, one skilled in the art could readily recognize that Achar at most describes a polymer containing phthalocyanine monomeric units, but does not teach that a phthalocyanine itself is a polymer. Indeed, to the extent that Achar teaches using phthalocyanine as a monomer, it teaches one skilled in the art that phthalocyanine is not a "polymeric compound" as required by independent claims 1 and 9.

Further, as discussed above, one skilled in the art, in view of the specification, could readily understand that the term "polymeric compound" excludes oligomeric materials and small molecules. Thus, contrary to the Examiner's assertion, it would be apparent to one skilled in the art that the term "polymeric compound" recited in claims 1 and 9 does not include phthalocyanine even though these two claims do not explicitly recite so.

For the reasons set forth above and the reasons stated in Appellant's Brief on Appeal, Appellant submits that this rejection should be reversed.

Claims 5, 6, 15, and 17 under 35 U.S.C. §103(a) over Ou in view of Loutfy and Hirano

The Examiner does not present additional arguments in support of this rejection in the Answer. Appellant therefore submits that this rejection should be reversed for the reasons set forth above and in Appellant's Brief on Appeal.

Claims 6 and 16 under 35 U.S.C. §103(a) over Ou in view of Loutfy and Kan

The Examiner does not present additional arguments in support of this rejection in the Answer. Appellant therefore submits that this rejection should be reversed for the reasons set forth above and in Appellant's Brief on Appeal.

Claims 7 and 19 under 35 U.S.C. §103(a) over Ou in view of Loutfy and Phillipps

The Examiner does not present additional arguments in support of this rejection in the Answer. Appellant therefore submits that this rejection should be reversed for the reasons set forth above and in Appellant's Brief on Appeal.

Claim 13 under 35 U.S.C. §103(a) over Ou in view of Loutfy

The Examiner does not present additional arguments in support of this rejection in the Answer. Appellant therefore submits that this rejection should be reversed for the reasons set forth above and in Appellant's Brief on Appeal.

Claim 20 under 35 U.S.C. §103(a) over Ou in view of Loutfy and Suzuki

The Examiner does not present additional arguments in support of this rejection in the Answer. Appellant therefore submits that this rejection should be reversed for the reasons set forth above and in Appellant's Brief on Appeal.

For the reasons set forth above and the reasons stated in the Appeal Brief, Appellant submits that the final rejections should be reversed.

Please apply any charges to Deposit Account No. 06-1050, referencing Attorney's Docket No. 21928-0005US1.

Respectfully submitted,

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